

Scientific Bases for the Development of the NAAQS for Lead

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Lead, carbon monoxide, nitrogen oxides, sulfur dioxide, particulate matter, and ozone are the six major ambient air pollutants for which the Clean Air act specifies that the US EPA must periodically review the scientific bases (or “criteria”) for setting National Ambient Air Quality Standards. Characterization of all exposure-related effects on public health and welfare are published in the Air Quality Criteria Documents (AQCD) by EPA’s National Center for Environmental Assessment (NCEA). A First External Review Draft of the Lead AQCD was published in December, 2005, and reviewed by the Clean Air Scientific Advisory Committee (CASAC) in March, 2006. Based on comments from this review and from the public, NCEA is currently preparing a Second External Review of the Lead AQCD to be released in June, 2006, for public comment and CASAC review. After a second review, the final Lead AQCD will be published in October, 2006. The AQCD will contain up-to-date information on atmospheric chemistry, exposure assessment, dosimetry, toxicology, epidemiology, and ecology and a synthesis of this information. The AQCD provides major scientific bases for the EPA’s decision to revise or retain the current national ambient air quality standard for lead (1.5 ug/m^3 , quarterly average), along with other assessments (e.g., air quality, exposure, risk assessments) prepared by the Office of Air and Radiation, Office of Air Quality Planning and Standards. The Lead AQCD and associated assessments provide guidance for air quality managers, serve as a resource for states and international programs setting air quality standards and/or guidelines, and serve as a primary reference for the international research community. This poster will present some of the major new scientific findings regarding lead exposure, as well as health and ecological effects of lead.

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